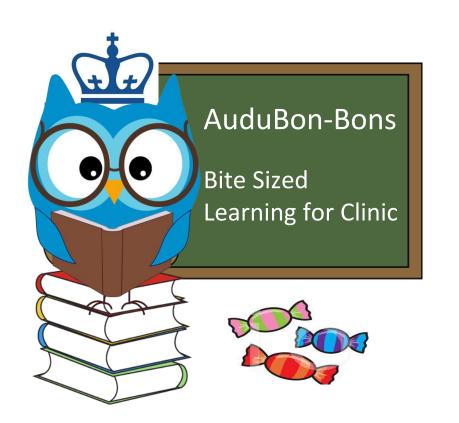
EVALUATION OF ABNORMAL UTERINE BLEEDING Structural Causes



Week 38

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Reading Assignment:

ACOG Practice Bulletin #128
Diagnosis of Abnormal Uterine Bleeding in Reproductive-Aged Women

LEARNING OBJECTIVES (**)

To recognize when a patient has abnormal uterine bleeding

 To understand the evaluation of a patient with abnormal uterine bleeding

 To identify the structural etiologies of abnormal uterine bleeding on imaging

CASE VIGNETTE

 Ms. Rosa Polipo, a 37 yo G2 P2002 woman, presents to clinic for evaluation of intermenstrual bleeding. For the past year, she has noticed spotting in between periods as well as occasional bleeding after intercourse. She denies dizziness or lightheadedness.



FOCUSED HISTORY

What elements of the patient's history are most relevant?

• PMH: Anxiety treated with psychotherapy

• PSH: LTCD x2, bilateral tubal ligation

• POBH: LTCD x2 for breech malpresentation and scheduled repeat CD with BTL

PGYNH: Regular menses prior to this past year. Denies history of STIs or abnormal paps. Up to date on pap. Last STI screening 1 year ago. Sexually active with mutually monogamous male partner. BTL for contraception. Denies history of fibroids or cysts.

MEDS: Multivitamin

• All: Sulfa – hives

• FH: Father had T2DM and CAD

• SH: Denies tob, drug, etoh use. Denies IPV. Accepts blood products.



PERTINENT PHYSICAL EXAM FINDINGS

What elements of the patient's physical exam are most relevant?

• General: Well appearing woman, VSS, no pallor

• CV: RRR

• Resp: CTAB

• Abd: Soft, ND, NT, appropriately gravid, pfannenstiel incision well healed

• Vulva: Normal external female genitalia. No lesions.

• Vagina: Pink, healthy mucosa. No discharge.

• Cervix: Parous os. No lesions. No discharge. No CMT.

• Uterus: NT. Anteverted. Not enlarged.

Adnexae: NT. No masses palpable.



DIAGNOSIS OF ABNORMAL UTERINE BLEEDING

- What is the definition of abnormal uterine bleeding?
 - "Menstrual flow outside the normal volume, duration, regularity, or frequency"
 - 1/3 of outpatient visits to the gynecologist are for AUB
- What is the normal volume of menses?
 - Less than 80mL
 - Unrealistic to use this definition in practice.
 - Should instead use patient's perception of excessive bleeding.
- What is the normal duration of menses?
 - 5 days
- What is the normal frequency of menses?
 - Every 21 to 35 days



DIFFERENTIAL DIAGNOSIS OF ABNORMAL UTERINE BLEEDING

Abnormal Uterine Bleeding (AUB)

- Heavy menstrual bleeding (AUB/HMB)
- · Intermenstrual bleeding (AUB/IMB)

PALM: Structural Causes

Polyp (AUB-P)

Adenomyosis (AUB-A)

Leiomyoma (AUB-L)

Submucosal myoma (AUB-L_w)

Other myoma (AUB-L₀)

Malignancy & hyperplasia (AUB-M)

COEIN: Nonstructural Causes

Coagulopathy (AUB-C)

Ovulatory dysfunction (AUB-O)

Endometrial (AUB-E)

latrogenic (AUB-I)

Not yet classified (AUB-N)



EVALUATION OF ABNORMAL UTERINE BLEEDING

Box 2. Diagnostic Evaluation of Abnormal Uterine Bleeding

Medical History

- · Age of menarche and menopause
- · Menstrual bleeding patterns
- Severity of bleeding (clots or flooding)
- Pain (severity and treatment)
- · Medical conditions
- Surgical history
- Use of medications
- Symptoms and signs of possible hemostatic disorder

Physical Examination

- · General physical
- · Pelvic Examination
- —External
- -Speculum with Pap test, if needed*
- -Bimanual

Laboratory Tests

- · Pregnancy test (blood or urine)
- · Complete blood count
- Targeted screening for bleeding disorders (when indicated)[†]
- · Thyroid-stimulating hormone level
- Chlamydia trachomatis

Available Diagnostic or Imaging Tests (when indicated)

- Saline infusion sonohysterography
- · Transvaginal ultrasonography
- Magnetic resonance imaging
- Hysteroscopy

Available Tissue Sampling Methods (when indicated)

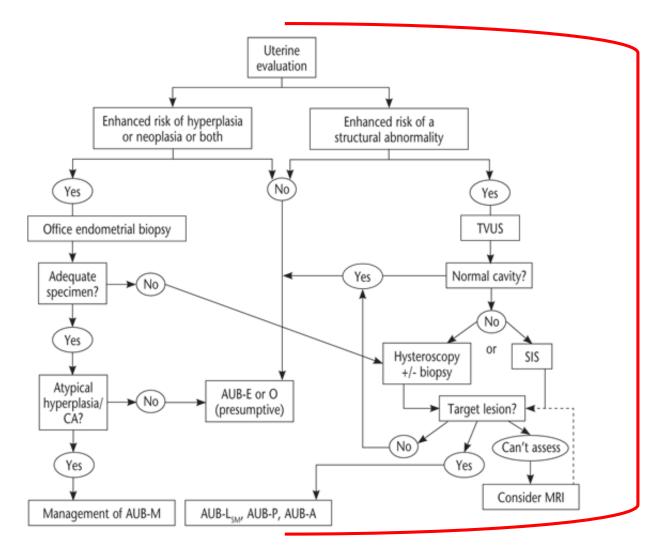
- Office endometrial biopsy
- Hysteroscopy directed endometrial sampling (office or operating room)

*For the nonadolescent patient only.

†Including a coagulation panel for adolescents and adult patients with suspected bleeding disorders.



UTERINE EVALUATION





IMAGING MODALITES

- What is the sensitivity and specificity of TVUS for assessment of intracavitary pathologies?
 - Sensitivity: 56%
 - Specificity: **73**%
 - More useful in evaluation of the myometrium
- Is SIS less effective, as effective, or more effective than TVUS in assessing intracavitary pathologies?
 - More effective
- Is SIS less effective, as effective, or more effective than hysteroscopy in detecting structural versus histopathologic abnormalities of the endometrium?
 - As effective

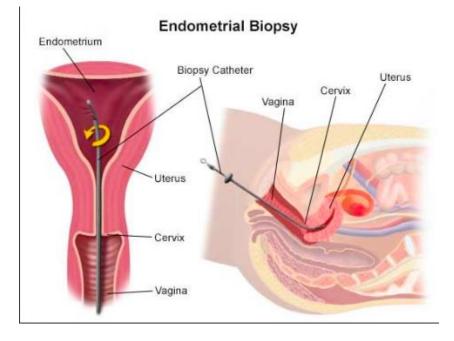
SIS VERSUS ENDOMETRIAL BIOPSY

Is there any advantage to SIS over endometrial biopsy?

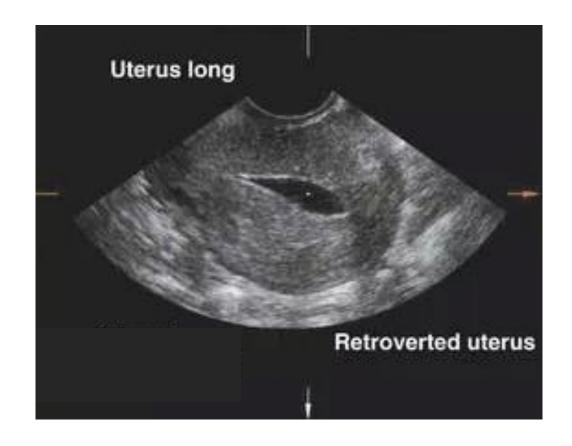
 Only SIS can distinguish focal versus uniform thickening of the endometrium

Localized thickening of the endometrium may not yield adequate sampling

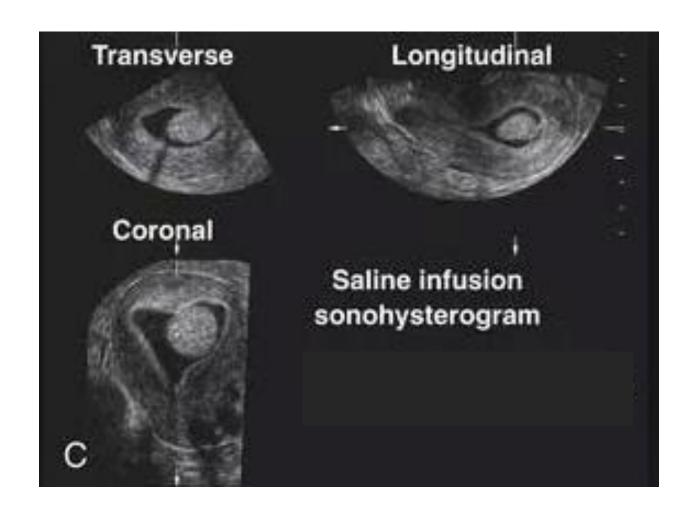
from an endometrial biopsy





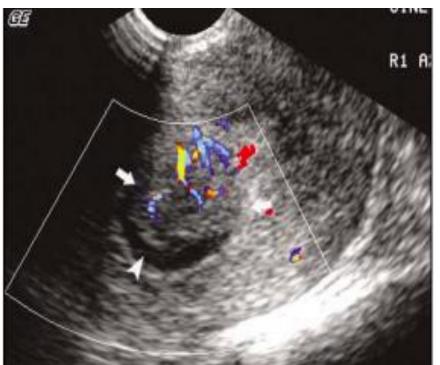












Submucosal fibroid

HOW WOULD YOU INTERPRET THIS TVUS AND SIS?



Uniformly thickened endometrium









Focally thickened endometrium

SOCIAL DETERMINANTS OF HEALTH

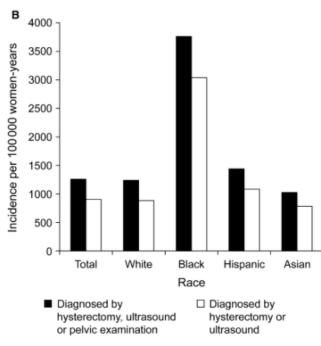


Figure 1. (A) Incidence of uterine fibroids (UFs) in US registry studies. ^{44,46,48,50–56,58–68,96} (B) Incidence of UFs according to race in the Nurses' Health Study II. ⁴⁴ BWHS, Black Women's Health Study; CTS, California Teachers Study; NHSII, Nurses' Health Study II.

Studies have shown Black race is associated with a 2.14 to 3.25 RR for uterine leiomyomas.



EPIC.PHRASE

.BBAUBS

Description: Abnormal uterine bleeding structural counseling

Patient's ultrasound showed *** as the etiology of their abnormal uterine bleeding. I reviewed this diagnosis with the patient, and counseled on their treatment options including ***. After discussion of the risks and benefits, they decided to proceed with ***. Follow-up plan as follows: ***.

CODING AND BILLING

• ICD-10 Code

- N93.9
 - Abnormal uterine and vaginal bleeding, unspecified
- CPT Codes
 - 99214
 - Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components:
 - A detailed history; a detailed examination; medical decision making of moderate complexity.
 - Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.
 - Usually, the presenting problem(s) are of moderate to high severity.
 - Typically, 25 minutes are spent face-to-face with the patient and/or family.

EVIDENCE

- Basic Medical Key: Hysterosalpinography and Sonohysterography.
 https://basicmedicalkey.com/hysterosalpingography-and-sonohysterography/
 (Accessed June 2019)
- Diagnosis of abnormal uterine bleeding in reproductive-aged women. Practice Bulletin No. 128. American College of Obstetricians and Gynecologists. Obstet Gynecol 2012;120:197–206.
- Stewart et al. Epidemiology of uterine fibroids: a systematic review. BJOG. 2017; 1501-1512.
- <u>The University of Auckland: The endometrial pipelle sampling procedure.</u> https://www.fmhs.auckland.ac.nz/en/som/about/our-departments/obstetrics-and-gynaecology/our-research/pip-studies/about.html (Accessed June 2019)
- Wiley Online Library: Saline Infusion Sonohysterography.
 https://onlinelibrary.wiley.com/doi/pdf/10.7863/jum.2004.23.1.97
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